

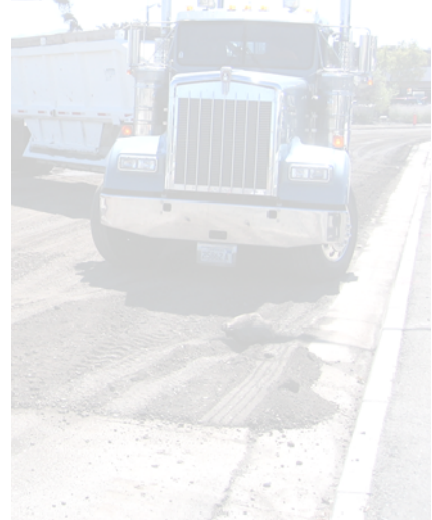
MONTANA DEPARTMENT OF TRANSPORTATION

HIGHWAY PROJECT COST ESTIMATING AND MANAGEMENT (HPCE)



CONTRACT#: 308059, RESEARCH PROJECT#: 8189

DATE: OCTOBER 4, 2007
MONTHLY PROGRESS REPORT # 7
PERIOD: SEPTEMBER 1- 30, 2007



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INTRODUCTION

Sierra Transportation Engineers, Inc. (STE) is pleased to provide its seventh monthly progress report for Montana Department of Transportation (MDT) contract number 308059, titled "Highway Project Cost Estimating and Management (HPCE)." This monthly progress report covers the period September 1, 2007 to September 30, 2007.

The overall objective of this project is to develop a comprehensive document to determine the best practice of efficient highway cost estimating for Montana. Upon completion of this research, recommendations are to be made for improvements to the current cost estimation process.

The specific tasks identified in the project work plan are:

- Task 1 - MDT's Structure, Operations, and Current Process
- Task 2 - Critical Review of NCHRP 8-49 Literature Review
- Task 3 - Recommendations
- Task 4 - Consultant Visits and Schedule
- Task 5 - Develop Detailed Strategic Procedure
- Task 6 - Implementation Plan

The following paragraphs describe the work accomplished during this reporting period under each task.

TASK 1 – MDT'S STRUCTURE, OPERATIONS, AND CURRENT PROCESS

During this reporting period, STE continued its efforts on understanding MDT's current structure, operations and procedures for cost estimation. A draft data request template called MDT HPCE data request template was created using MS Excel spreadsheets. STE provided an electronic copy of the template to MDT for review and comment on April 13, 2007. STE worked closely with the MDT Project Manager and Project Panel to customize the data request template to follow MDT practices. On July 3rd, 2007 STE finalized and submitted the data request template to MDT. The data request template will be used to provide project cost data to STE on at least 10 (and preferably 20) MDT projects. STE has requested data on projects of different types, categories, and from different districts. STE also asked for projects that were under, over, and close to the original base cost.

Members of STE team spent the week of September 17, 2007 at the MDT headquarters in Helena to interview MDT personnel involved in the cost estimation process. The main objective of those interviews was to capture how each of MDT groups deals with the unknown uncertainties (risks) during a life span of a project. The focus was on learning how each individual group changes project cost or schedule when confronted with previously unaccounted project events. STE sent a document containing a set of questions for each group or individuals and a write-up on project goals and objectives (i.e., what STE is planning to achieve) for distribution to all interviewees prior to the trip.

Worked planned for next month

STE will continue reviewing the current MDT structure, operations, and processes. STE will process the information gathered from the interviews with MDT personnel. The results of interviews will greatly assist STE in developing recommendations and a new strategic procedure for cost estimation.

TASK 2 – CRITICAL REVIEW OF NCHRP 8-49 LITERATURE REVIEW

During this reporting period, STE continued its review of NCHRP Report 574, "Guidance for Cost Estimation and Management for Highway Projects during Planning, Programming, and Preconstruction." STE is utilizing the NCHRP 8-49 findings in developing questionnaires for its upcoming interviews with MDT personnel. STE has assembled its literature review findings in a draft document that will be included in the interim report to MDT.

Worked planned for next month

STE will continue reviewing the NCHRP 8-49 report and its literature review of various state agencies across the United States.

TASK 3 – RECOMMENDATIONS

Information gathered from pre-trip questions and surveys along with the ongoing literature review is being used to develop the framework for project recommendations. During this reporting period, STE continued the evaluation of Monte Carlo simulation software namely Crystal Ball and also @RISK for possible use as risk analysis tools on the upcoming data from MDT.

Worked planned for next month

STE will continue the evaluation of Monte Carlo simulation software for possible use as risk analysis tools on MDT data. Based on the knowledge gained from the interviews and a review of current programs used by MDT personnel for cost estimation, STE will formulate its recommendations for enhancing the current MDT cost estimation procedures.

TASK 4 – CONSULTANTS VISITS AND SCHEDULE

Members of STE team spent the week of September 17, 2007 at the in MDT headquarters in Helena to interview MDT personnel involved in cost estimation process.

Worked planned for next month

No visits are planned for October.

TASK 5 – DEVELOP DETAILED STRATEGIC PROCEDURE

No work was scheduled nor conducted for this task during this reporting period. However, the scope of activities under this task was thoroughly discussed with the MDT project panel during the kick-off meeting.

Worked planned for next month

No activity planned.

TASK 6 – IMPLEMENTATION PLAN

No work was scheduled nor conducted for this task during this reporting period. However, the scope of activities under this task was thoroughly discussed with the MDT project panel during the kick-off meeting.

Worked planned for next month

No activity planned.

PROJECT SCHEDULE AND FINANCIAL SUMMARIES

Figure 1 shows the project expenditures versus planned budget for each task. Figure 2 represents the cumulative project expenditures versus budget for the entire project to date.

All project activities are per schedule and the project is within planned budget. STE does not foresee any problems to report.

Figure 1. Expenditures Versus Planned Budget for Each Task

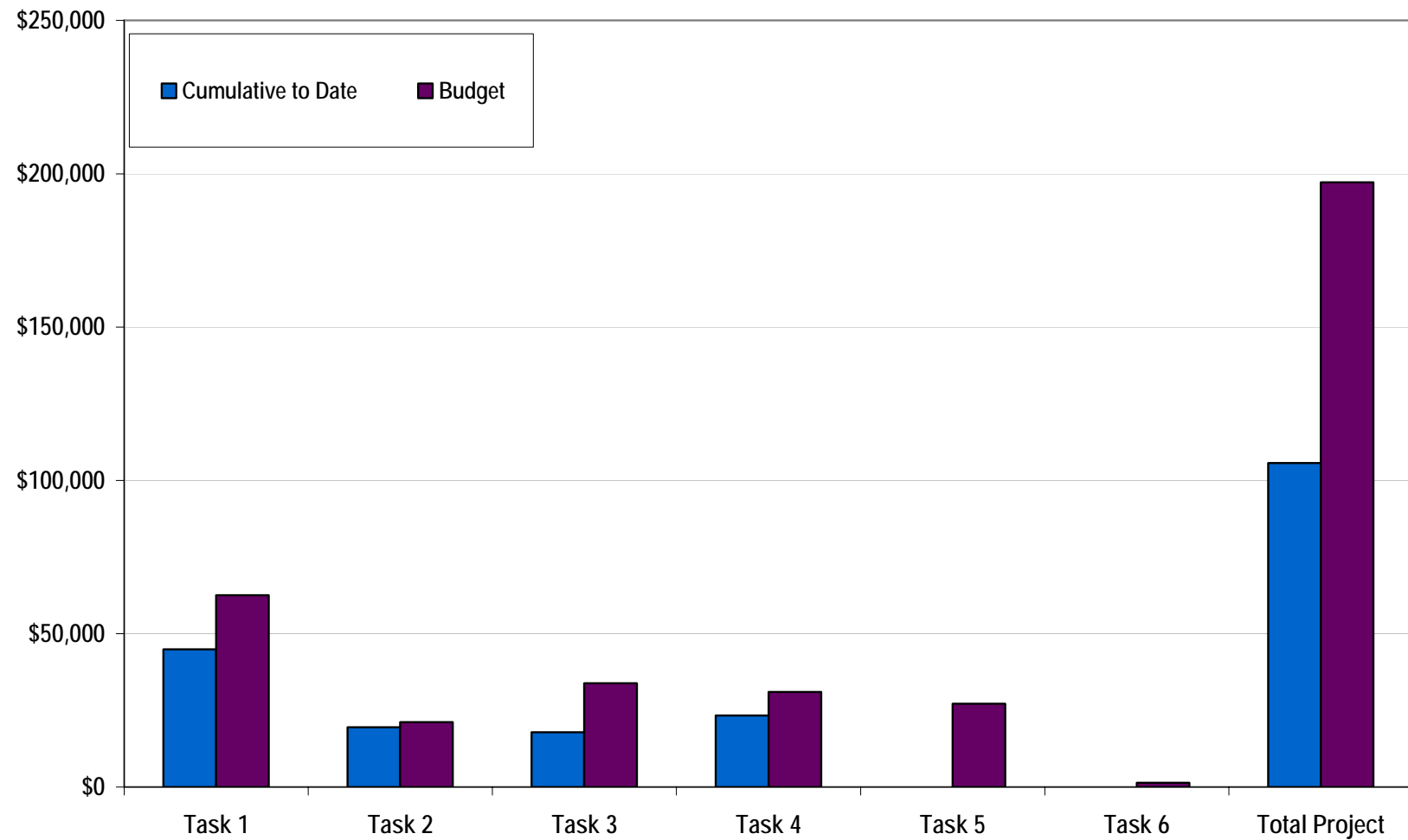


Figure 2. Cumulative Expenditures Versus Budget

